

WHAT IS CLAIMED IS:

1. An electronic control system for a vehicle seat comprises:
 - a seat base motor configured to move a seat base forward and backward;
 - a seat back motor configured to adjust an angle of inclination of a seat back;
 - an operator input device configured to receive operator commands for movement of the vehicle seat; and
 - a control circuit configured to receive the operator commands and to control the seat base motor and seat back motor;

wherein the control circuit is configured to move the seat base and the seat back at a ratio of approximately 1 degree of inclination to between approximately 1 mm to approximately 4 mm of forward or backward movement of the seat base.
2. The electronic control system of claim 1 wherein the control system is configured to move the seat back and seat base simultaneously at a ratio of approximately 1 degree of inclination to between approximately 1.5 mm to approximately 3 mm of forward or backward movement of the seat base.
3. The electronic control system of claim 1 wherein the ratio is approximately 1 degree of inclination to approximately 1.5 mm of forward or backward movement of the seat base.
4. The electronic control system of claim 1 wherein the seat base moves at a first speed in response to receiving an operator command for movement of the seat back and the seat base moves at a second speed in response to receiving an operator command for movement of the seat base alone, wherein the first and second speeds are different.
5. The electronic control system of claim 4 wherein the first speed is less than the second speed.

6. The electronic control system of claim 1 wherein the seat back can be adjusted through a range of motion so that for a portion of the range of motion the seat back cannot be adjusted without movement of the seat base.

7. The electronic control system of claim 1 wherein the control circuit is configured to move the seat base generally forward in response to an operator command to recline the seat back and to move the seat base generally backward in response to an operator command to incline the seat back.

8. An electronic control system for a vehicle seat comprising:
a seat base motor configured to move a seat base forward and backward;
a seat back motor configured to adjust an angle of inclination of a seat back;
an operator input device configured to receive operator commands for movement of the vehicle seat; and
a control circuit configured to receive the operator commands and to control the seat base motor and seat back motor;
wherein the control circuit includes a voltage divider circuit configured to provide a first voltage across the seat base motor and a second voltage across the seat back motor, wherein the first and second voltages are different.

9. The electronic control system of claim 8 wherein the control circuit is configured to move both the seat base and the seat back simultaneously at a ratio of approximately 1 degree of inclination to between approximately 1.5 mm to approximately 3 mm of forward or backward movement of the seat base.

10. The electronic control system of claim 8 wherein the first voltage is less than the second voltage.

11. The electronic control system of claim 8 wherein the seat base moves at a first speed in response to receiving an operator command for movement of the seat back and the seat base moves at a second speed in response to receiving an operator command for movement of the seat base alone, wherein the first speed is less than the second speed.

12. The electronic control system of claim 8 wherein the seat back can be adjusted through a range of motion so that for a portion of the range of motion the seat back cannot be adjusted without movement of the seat base.

13. The electronic control system of claim 8 wherein the control circuit is configured to move the seat base generally forward in response to an operator command to recline the seat back and to move the seat base generally backward in response to an operator command to incline the seat back.

14. A vehicle seat having an electronic control system comprising:

- a track;
- a seat base coupled to the track;
- a seat back pivotally coupled to the track;
- a seat base input device configured to receive operator commands for movement of the seat base;
- a seat back input device configured to receive operator commands for movement of the seat back;
- a control circuit configured to receive the operator commands from one or both the seat base input device and the seat back input device and to control the seat base motor and seat back motor;
- a seat base motor configured to move the seat base forward and backward; and
- a seat back motor configured to adjust an angle of inclination of the seat back;

base and the seat back in response to receiving a command from the seat back input device; and

wherein the control circuit is configured to move the seat base alone in response to receiving a command from the seat base input device.

15. The vehicle seat of claim 14 wherein the control circuit is configured to move the seat base substantially proportional to the movement of the seat back when the seat base and seat back are both moving.

16. The vehicle seat of claim 15 further comprising a potentiometer that measures the position of the seat back, wherein the control circuit is configured to maintain the position of the seat base substantially proportional to the position of the seat back.

17. The vehicle seat of claim 14 wherein the control circuit is configured to move both the seat base and the seat back at a ratio of approximately 1 degree of inclination to between approximately 1.5 mm to approximately 3 mm of forward or backward movement of the seat base.

18. The vehicle seat of claim 14 wherein the seat base moves at a first speed in response to receiving an operator command for movement of the seat back and the seat base moves at a second speed in response to receiving an operator command for movement of the seat base alone, wherein the first speed is less than the second speed.

19. The vehicle seat of claim 14 wherein the control circuit is configured to move the seat base generally forward in response to an operator command to pivot the seat back backward and to move the seat base generally backward in response to an operator command to pivot the seat back forward.

20. The vehicle seat of claim 14 wherein the control circuit includes a microprocessor.